

Please replace the paragraph beginning at line 16 of page 1 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a² --In accordance with the invention there is provided a high purity tantalum article, such as a sputtering target having substantially uniform texture. In particular, the invention comprises a tantalum sputtering target of at least about 99.95% tantalum and a substantially uniform {100} crystallographic orientation.--.

Please replace the paragraph beginning at line 21 of page 1 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a --A process to provide the tantalum sputtering target is disclosed in Application No. 09/098,761 filed on June 17, 1998, the disclosure of said application is expressly incorporated herein by reference. The process comprises--

Please replace the paragraph beginning at line 16 of page 2 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a⁴ --The rolling reduction per pass is desirably in accordance with a relationship of the minimum reduction per pass, the roll diameter and the desired billet thickness after forging. Generally, the reduction per pass during rolling is about 10% to 20% per pass.--.

Please replace the paragraph beginning at line 24 of page 5 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a⁵ --Strain in equation (2) is high enough to optimize static recrystallization only for thin targets. But even for these targets non-uniformity in strain distribution through a billet

volume may significantly reduce the amount of strain in some areas. Also, demands on capacity of a forging press or rolling mill necessary to provide strains of equation (2) above for large target billets may be too high for some applications. Therefore, there may be restrictions on attainable strains by rolling or forging operations.--

Please replace the paragraph beginning at line 3 of page 11 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

--Metallic elements by ICP (Inductively Coupled Plasma) or GDMS (Glow Discharge Mass Spectroscopy) analysis.--

Please replace the paragraph beginning at line 5 of page 11 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

--Billets were upset-forged at room temperature to a thickness of 75 mm. Teflon films of 150 x 150 mm² and thickness of 1.2 mm were used as lubricants for frictionless upsetting (alternatively frictionless upset-forging can also be performed at 300 deg. C). Thereafter cold rolling with a roll diameter of 915 mm was performed in sixteen passes with partial reductions of 12% per pass along four directions under an angle of 45°.--

Please replace the paragraph beginning at line 14 of page 11 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

--Coupons across the thickness of the rolled billet were cut from central, mid-radius and external areas and annealed at different temperatures during 1 hour (h) and investigated for structure and texture and photomicrographs thereof are shown in FIGS.

1-6. FIGS. 1-3 are photomicrographs of the center, mid-radial and edge, respectively, showing the fine grain structure of a tantalum target. FIGS. 4-6 are graphs showing {100} crystallographic orientation at the center, mid-radial and edge.--

Please replace the paragraph beginning at line 9 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹⁰ --Step 1: Anneal the billet in vacuum.--

Please replace the paragraph beginning at line 11 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a --Step 2: Upset-forge billet using teflon as a solid lubricant at room temperature or at 527F to specific height required for rolling.--

Please replace the paragraph beginning at line 11 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹² --Step 3: Fly-cut surfaces of the forged billet.--

Please replace the paragraph beginning at line 16 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹³ --Step 5: Anneal in vacuum to obtain a fine grain size and uniform texture.--

Please replace the paragraph beginning at line 20 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹⁴ --Step 1: Upset-forge using teflon to a height such that $M_o = 1.0$.--

Please replace the paragraph beginning at line 23 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹⁵ --Step 3: Upset-forge billet using teflon to a final height as required for rolling operation.--

Please replace the paragraph beginning at line 25 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹⁶ --Step 4: Fly-cut the surfaces of the forged billet.--

Please replace the paragraph beginning at line 32 of page 12 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹⁷ --Step 1: Anneal the billet in vacuum.--

Please replace the paragraph beginning at line 3 of page 13 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹⁸ --Step 3: Fly-cut surfaces of the forged billet.--

Please replace the paragraph beginning at line 6 of page 13 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a¹⁹ --Step 5: in vacuum to obtain a fine grain size and uniform texture.--

Please replace the paragraph beginning at line 10 of page 13 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a²⁰ --Step 1: Anneal the billet in vacuum.--

Please replace the paragraph beginning at line 12 of page 13 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a²¹ --Step 2: Upset-forge billet using teflon as a solid lubricant at room temperature or at 572F.--

Please replace the paragraph beginning at line 13 of page 13 with the following clean replacement paragraph in accordance with 37 C.F.R. § 1.121(b)(1)(ii):

a²² --Step 3: Fly-cut surfaces of the forged billet.--

In the Claims

Please replace the indicated claims with the following clean versions of the claims, in accordance with 37 C.F.R. § 1.121(c)(1)(i). Cancel all previous versions of any pending claim.

A marked up version showing amendments to any claims being changed is provided in one or more accompanying pages separate from this amendment in accordance with 37 C.F.R. § 1.121(c)(1)(ii). Any claim not accompanied by a marked up version has not been changed relative to the immediate prior version, except that marked up versions are not being supplied for any added claim or canceled claim.